Compact and lightweight horn speaker electronic sounder
High sound quality, High volume

IP65 · RoHS · 110dB

MENICS SIGNALTECHNOLOGY



Terminal block series

MSP-TP Panel mounting type

MSP-TB External fixation type

> Easy wiring with crimp terminal application
> Front IP65 protective structure (MSP-TP type)
> Possible volume level control
> Sound type: 3 Channel (melody type, siren-type)

Lead wiring series

MSP-LP Panel mounting type

MSP-LB External fixation type

> Back side-lead wire type
> IP65 protective structure – available to install outdoor
> Sound Built-in type: 3 Channel (Melody type, siren-type)

User manual

Thank you for purchasing Menics product.
For the proper and safe use of this product, please read and fully understand this manual before use.

Instructions for safety

※ 'Instruction for safety is made to prevent accidents or risks in advance by using the product safely and correctly and be sure to observe it.

※ Instructions are divided into two categories as "Warning" and "Attention" and they are as follows.

⚠Warning	If instruction is violated, there is the possibility of serious injury or death.
⚠Attention	If instruction is violated, there is possibility of minor injury or damage on the product.

※ The meaning of the picture symbols used in the product and User manual are as follows.
⚠ is the sign meaning attention needs to be paid because there is the concern of risk occurrence under certain condition.

⚠ Warning

1. In case it is used for the machines which make greater impact on life or property (e.g. nuclear power control, medical equipment, railroad car, aerospace, combustion equipment, recreation equipment, etc. or safety devices), make sure to attach safety device bifariously before use.
   There is the possibility of causing huge losses resulted from fire, personal injury and property damage.
2. Do not disassemble and renovate the product. Please contact the head office or regional office for internal inspection or repair.
   There is the risk of causing fire, electrical shock and product damage.
3. Do not connect wire, check, or repair when the power is applied.
   There is a risk of electric shock.
4. Do not connect AC power to DC product. There is a risk of product damage.
5. Do not use close to the ears. There is a risk of hearing loss.

⚠ Attention

1. Do not use it outdoors while the rear of speakers are exposed.(MSP-T series)
   There is a risk of electric shock and product damage.
2. In case abnormality happens to the product, unplug the input power connection immediately.
   There is a risk of fire or product damage.
3. Do not use in places with severe vibration. There is the danger of product damage.
4. When cleaning, do not use water, organic solvent and clean with towel without moisture. There is the danger of electric shock or fire.

◇ MSP-T Series

MSP-TP type



MSP-TB type



◇ MSP-L Series

MSP-LP type



MSP-LB type



◉ Model Configuration

M S P - T P M - 0 2 (B)
① ② ③ ④ ⑤

① Series

MSP-T	Terminal block type
MSP-L	Lead wiring type

② Mounting type

P	Panel type
B	Bracket type

③ Sound type

M	Melody 3 channel
S	Siren 3 channel

④ Power supply

01	12VDC
02	24VDC
FF	100~240VAC

⑤ Body colors

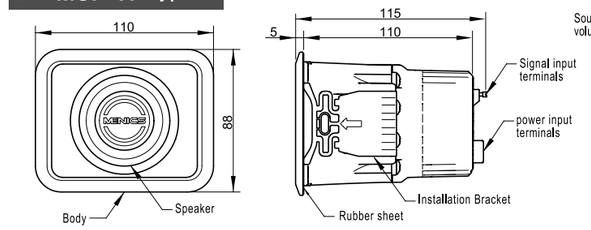
No display	Ivory
(B)	Black
(R)	Red
(P)	Nickel plated

◉ Rating / Performance

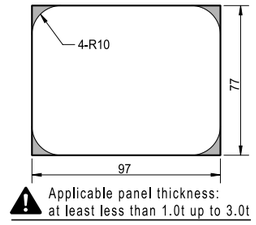
Series	MSP-T	MSP-L
Power supply	12VDC , 24VDC , 100~220VAC (50/60Hz)	
Allowable voltage range	12VDC±5% , 24VDC±10% , 100~240VAC±10%	
Current consumption (±10%)	12VDC: Melody type: 0.22A Siren type: 0.8A 24VDC: Melody type: 0.12A Siren type: 0.4A 100~240AC: Melody type: 0.13A Siren type: 0.13A	
Maximum volume(at 1M)	Melody type: 100±5dB , Siren type: 105±5dB , High volume siren type: 110±5dB	
Number of channels	Sound Types: 3 channels	
Sound type	Melody type: For Elise, Sweet Home, Cuckoo Waltz Siren type: Fire trucks, police cars, ambulance	
Volume control	Yes (internal volume control)	none
Volume range	DC type 70~100±5dB (1m) AC type 50~100±5dB (1m)	none
Color	Body - Ivory/Black/Red/Nickel plated , Horn speaker - black	
Material	Body - ABS , Rubbers - NBR	
Insulation resistance	Over 100㏁ (500VDC mega between terminals and case)	
Withstand voltage	500VAC 50 / 60Hz 1 min (between terminals and case before)	
Vibration resistance	0.75mm at 10~55Hz (cycle: 1 minute)	
Temperature	Ambient temperature: -20 ~ 50°C Storage ambient temperature: -20 ~ 65°C	
Ambient humidity	45~85% RH	
Protection structure	IP65 (Front panel)	IP65
Wire size	–	2464UL/22AWG , 6P , 450mm
Power input terminal screw tightening torques	0.4 ~ 0.6N.m	
Panel tightening screw fastening torque	0.7 ~ 0.8N.m	M8 Bolt: 5 ~ 6N.m
Approval	RoHS	
Weight	App. 436g (MSP-TP type)	App. 588g (MSP-LB type)

◉ External dimension and part name (Unit:mm)

MSP-TP type

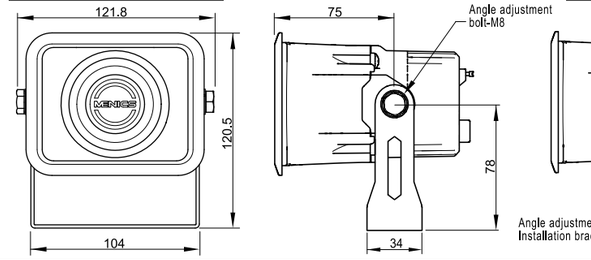


▼Panel cutout dimensions



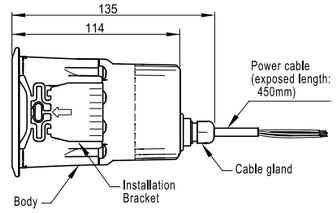
⚠ Applicable panel thickness: at least less than 1.0t up to 3.0t

MSP-TB type

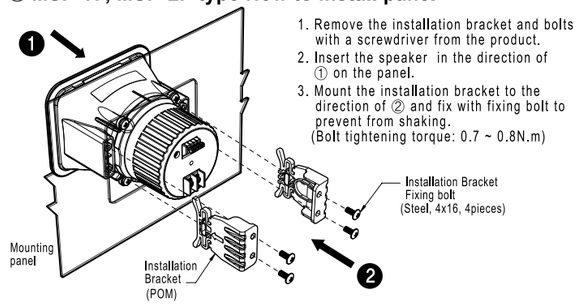


MSP-LB type

MSP-LP type



◉ MSP-TP, MSP-LP type How to install panel

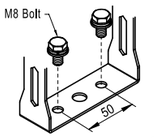


1. Remove the installation bracket and bolts with a screwdriver from the product.
2. Insert the speaker in the direction of ① on the panel.
3. Mount the installation bracket to the direction of ② and fix with fixing bolt to prevent from shaking.
   (Bolt tightening torque: 0.7 ~ 0.8N.m)

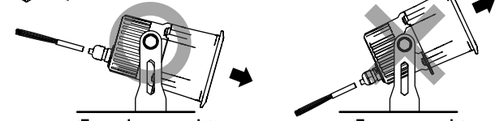
◉ MSP-TB, MSP-LB type How to install

Caution

- Install in the site without vibration or shock on a flat surface.
- Avoid installing in the site with strong alkali or strong acid.
- Do not use in the place near the equipment that generate strong magnetic field or electric noise..
- Do not install at the height of a person. There is a risk of hearing loss.

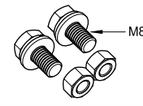


1. Fixed using M8 bolts in the hole of the angle adjusting holder. Do not fail to apply vibration absorbing rubber when installing in the place with strong vibration.
2. Please install downwards when installing outdoors to prevent rainwater from entering in the device.
3. Set the speaker angle and then fasten the angle adjustment bolt tight. (Tightening torque: 5 ~ 6N.m)



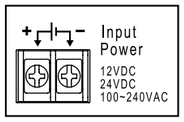
◉ Accessories

- Each two bolts and nuts to fix M8 are packaged.

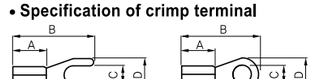


◉ MSP-T series Connection diagram

• Power input terminals



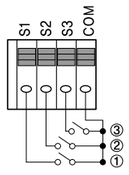
• Specification of crimp terminal



A	B	C	D	Nominated wire
4.0 over	16.0 below	3.0 over	6 below	22~16 AWG

※ It is recommended to lead wire short to reduce noise and use shield wire.

• Sound signal input terminals

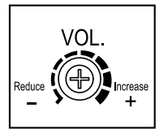


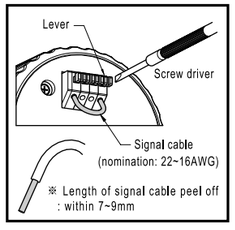
※ Connect signal wire to COM terminal of sound color input terminal and to the terminal of the selected sound type .

No	Termnals	Sound type: Melody type	Sound type: Siren type
①	COM - S1	for Elise	Fire truck
②	COM - S2	Sweet home	Police car
③	COM - S3	Cuckoo Waltz	Ambulance

※ Do not put power to the sound color signal input terminal.
There is a risk of damage to the circuit if powered.

• Volume control





▼ How to connect signal cable

1. Press the lever of the terminal with a small screw driver.
2. Insert peeled off signal cable into terminal hole.
3. Release pressing lever.

⚠ Caution

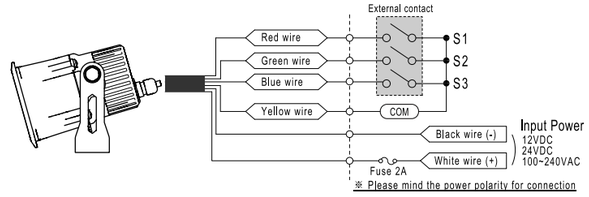
※ Keep the length of peeled off signal cable.
If the length of peeled off signal cable is too short, there is a risk of malfunction due to connection error and if too long, it may cause electric shock or short circuit.

※ Do not pull out signal cable to remove. There is a risk of damage to the terminal.
Do not fail to remove by handling the lever of the terminal.

◉ MSP-L series Wiring Diagram

Caution

- Connect the power same as indicated in the product. Otherwise, over current may cause a failure of the product.
- Do not apply power to the sound color signal line and COM line. Short circuit and over current may cause a failure of the product.



No	Wire color	Sound type: Melody type	Sound type: Siren type
S1	Red	for Elise	Fire truck
S2	Green	Sweet home	Police car
S3	Blue	Cuckoo Waltz	Ambulance

⚠Caution

※ Connect external fuse between the product and the power supply to protect internal circuitry.
Siren type: 2A , Melody type:0.5A

※ Please isolate the signal line that is not in use.
There is a risk of electric shock.

※ External dimension and the performance is subject to change without prior notice to improve the product.

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